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10/573,018	11/21/2006	Everest Barjau Delgado	21879-00065-US1	2593
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CRUZ, MACIDA				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/573,018

Applicant(s)

DELGADO, EVEREST BARJAU

Examiner

MAGDA CRUZ

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-11 is/are rejected.
7) ☒ Claim(s) 1-11 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 22 March 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "C", "E", "F" and "D" have been used to designate the "Electronic and Software Elements" (see claims 1-8 and 11). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
2. In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

4. Claims 1-11 are objected to because of the following informalities:

The claims are objected to because they include reference characters which are not enclosed within parentheses.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so

as to avoid confusion with other numbers or characters which may appear in the claims.

See MPEP § 608.01(m).

Appropriate correction is required.

5. Claims 1-8 and 11 are objected to because of the following informalities:

a. Regarding claims 1-8 and 11, reference characters "C", "E", "F" and "D" have been used to designate the "Electronic and Software Elements". Applicant is reminded of using a consistent terminology throughout the application.

b. Regarding claim 1, line 6, there is a spelling error in the word "physcial". Said word should be replaced by - - physical - - . Also, it says "stereoscopic screen in transparent". The examiner believes that the applicant meant "stereoscopic screen is transparent".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claims 1-8 and 11 recites the limitation "Electronic and Software Elements". There is insufficient antecedent basis for this limitation in the claim.

- b. Claims 1 and 3 recites the limitation "3D Optical Subsystem". There is insufficient antecedent basis for this limitation in the claim.
- c. Claim 3 recites the limitation "optional Optical Geometric Variations" in line 2. There is insufficient antecedent basis for this limitation in the claim.
- d. Claim 5 recites the limitation "3D Multifunctional System" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.
- e. Claim 9 recites the limitation "additional G functional devices" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.
- f. Claim 10 recites the limitation "H case" in line 2. There is insufficient antecedent basis for this limitation in the claim.
- g. Claim 11 recites the limitations "computer operating system", "software to administrate and operate databases and processes" and "computer software and hardware elements" in lines 6-7. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Vrachan et al.

Vrachan et al. (US Patent Number 6,808,268 B2) disclose:

- Regarding claim 1, 3-D image projection system characterized by the Electronic and Software Elements (i.e. software development tools), combined with the 3D Optical Subsystem built by a stereoscopic screen (column 3, lines 35-41), so that images can be viewed in daylight, with an immersion effect, suspended in the air, as real volumes in third dimension and without a visual aid (column 2, lines 50-52). The stereoscopic screen (Figure 6, element 182) is transparent, with certain physical properties and may has certain inclination and bend, according to the geometric optical variations required (column 15, lines 4-7).
- Regarding claim 2, the Electronic and Software Elements (i.e. software development tools) variations used to reproduce two-dimensional images that are selected from any possible combination among projection systems and media storage systems (column 12, lines 41-44).
- Regarding claim 3, the optional Optical Geometric Variations (i.e. polarizers, mirrors, antireflective film) which can also be combined with the Electronic and Software Elements (i.e. software development tools) and the 3D Optical Subsystem (Figure 2, element 120) for allowing the use of optical geometric variations, including additional optical lenses, mirrors or secondary screens (Figure 2, elements 126, 127, 128 and 129) between the projection screen and the stereoscopic screen (Figure 2, element 154), for different applications and requirements (column 9, lines 46-54).

- Regarding claim 4, the Electronic and Software Elements to built an Operation and Projection Schedule and a 3D Video-Library to control and project continuously different 3D messages in a period of time (column 6, lines 49-52), turn on and off the 3D System (i.e. observer's/user's input) and report the operation status (i.e. tracking a particular sequence; column 4, lines 66-67).
- Regarding claim 5, the Electronic and Software Elements (i.e. software development tools) that allows the 3D Multifunctional System to be controlled from a Central Unit (i.e. computer) through an Operation and Projection Schedule and a 3D Video-Library (column 6, lines 49-52).
- Regarding claim 6, the Electronic and Software Elements (i.e. software development tools) that control, administrate, supervise and operate the system from a Central Unit (i.e. computer) through a telecommunications solution (column 7, lines 46-49).
- Regarding claim 7, the Electronic and Software Elements (i.e. software development tools, which is part of the computer) that control, administrate, supervise and operate the system in situ (column 6, lines 46-49).
- Regarding claim 8, the Electronic and Software Elements (i.e. software development tools) to enhance the global effect of 3D images projection, such as back plane screens, video or camera recorders or interactive

functions based on presence sensors, among many others (column 4, lines 33-36).

- Regarding claim 9, one or several of the additional functional devices, such as a printed information distribution system; queue ticket dispenser; public or private telephones (column 4, lines 47-50); weighing system; optical reading system; form dispenser with support table and pen; vending machines; automatic ticketing and payment systems; handheld, PDA (column 14, line 6), computer or other electronic devices that interact to load and download information (column 14, lines 12-13); any other equivalent solution that may be required in a public or private area where people tend to congregate in groups or individually (column 14, lines 21-23).
- Regarding claim 10, hardware and software components (elements 120, 122 and 124) to set up the operation of the system under different environments and climatic conditions (column 5, lines 24-27).
- Regarding claim 11, internal or external media storage and/or specific image projection devices and their interfaces (column 4, lines 53-55); the computer operating system (element 108); the software to administrate and operate databases and processes (column 4, lines 59-62); the computer software and hardware elements (column 3, lines 35-41).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Larussa (US Patent Number 6,318,868 B1) discloses an interactive virtual image display device.

Krause (US Patent Number 6,364,490 B1) teaches a virtual image projection device.

Sullivan et al. (US Pub. No. 2002/0113752 A1) show a multi-planar volumetric display system and method of operation.

Westort et al. (US Patent Number 6,598,976 B2) disclose a method and apparatus for image enhancement.

Westort et al. (US Patent Number 6,612,701 B2) teach an image enhancement in a real image projection system.

Yoshino (US Pub. No. 2004/0027450 A1) shows three dimensional image generators.

Westort et al. (US Patent Number 6,733,140 B2) teach a transmission enhancement for a real image projection system.

Hines (US Patent Number 6,817,716 B1) discloses aerial-image display systems.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MAGDA CRUZ whose telephone number is (571)272-2114. The examiner can normally be reached on Monday through Thursday 8:00-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on (571) 272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MC/
Patent Examiner

August 24, 2009

/Diane I Lee/
Supervisory Patent Examiner, Art Unit 2851